AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (currently amended): An ultrasonographic equipment comprising:

an ultrasonic transducer unit in which ultrasonic transducer elements for scanning an ultrasonic beam are arranged in a state of an array;

a transducer unit oscillating motor for making the ultrasonic transducer unit perform oscillation scanning in the direction crossing the scanning direction of the ultrasonic beam;

an oscillation angle detection means for detecting an oscillation angle of the ultrasonic transducer unit and generating oscillation angle information;

an ultrasonic transmission means for exciting the ultrasonic transducer element to form the ultrasonic beam;

an ultrasonic receiving means for forming the ultrasonic beam from an ultrasonic echo received by the ultrasonic transducer element and converting the ultrasonic beam to visible image data;

a three-dimensional image processing means for receiving data streams comprising image data arrays and corresponding oscillation angle information, and forming a three-dimensional image based on the oscillation angle

detected by the oscillation angle detection means and image data outputted from the ultrasonic receiving means, wherein the oscillation angle information comprises data inserted between the image data arrays at blanking times of the data streams; and

an image display means for displaying the three-dimensional image.

Claim 2 (currently amended): An ultrasonographic equipment comprising:

an ultrasonic transducer unit in which ultrasonic transducer elements for scanning an ultrasonic beam are arranged in a state of an array;

a transducer unit oscillating motor for making the ultrasonic transducer unit perform oscillation scanning in the direction crossing the scanning direction of the ultrasonic beam;

an oscillation angle detection means for detecting an oscillation angle of the ultrasonic transducer unit and generating oscillation angle information;

an ultrasonic transmission means for exciting the ultrasonic transducer element to form the ultrasonic beam;

an ultrasonic receiving means for forming the ultrasonic beam from an ultrasonic echo received by the

ultrasonic transducer element and converting the ultrasonic beam to visible image data;

an oscillation angle information adding means for adding the oscillation angle information generated by the oscillation angle detection means into the image data outputted from the ultrasonic receiving means, wherein the image data comprises image data arrays and the oscillation angle information is data inserted between the image data arrays by the oscillation angle information adding means;

a three-dimensional image processing means for receiving the image data arrays and the oscillation angle information inserted between the image data arrays, and forming a three-dimensional image based on the image data arrays and the inserted oscillation angle information outputted from the oscillation angle information adding means; and

an image display means for displaying the three-dimensional image.

Claim 3 (previously presented): The ultrasonographic equipment according to claim 1, wherein the three-dimensional image processing means forms a three-dimensional image based on angle information obtained by interpolating the oscillation angle information detected by the oscillation angle detection means.

Claim 4 (previously presented): An ultrasonographic equipment comprising:

an ultrasonic transducer unit which two-dimensionally scans a fault plane of a test body, and is driven to be oscillated in the direction orthogonal to a scanned face of the two-dimensional scanning;

a scanning conversion means for recording a receiving signal obtained by the two-dimensional scanning by the ultrasonic transducer unit in a frame memory to create two-dimensional image data, reading out the two-dimensional image data, and outputting the two-dimensional image data;

a delay means for delaying position information in the oscillation direction of the ultrasonic transducer unit by a processing time of the scanning conversion means; and

a three-dimensional image processing means for creating a three-dimensional image from the two-dimensional image data of a plurality of frames sequentially outputted from the scanning conversion means based on the position information in the oscillation direction delayed by the delay means,

wherein the delay means outputs the delayed position information to the three-dimensional image processing means, thereby synchronizing a timing of the outputted

two-dimensional image data with the delayed position information.

Claim 5 (currently amended): An ultrasonographic equipment comprising:

an ultrasonic transducer unit which two-dimensionally scans a fault plane of a test body, and is driven to be oscillated in the direction orthogonal to a scanned face of the two-dimensional scanning;

a scanning conversion means for receiving image data comprising image data arrays and further receiving oscillation angle information as data inserted between the image data arrays, and for recording a receiving signal obtained by the two-dimensional scanning by the ultrasonic transducer unit in a frame memory to create two-dimensional image data, writing position information in the oscillation direction of the ultrasonic transducer unit in the frame memory, reading out the two-dimensional image data and the position information, and outputting the two-dimensional image data and the position information; and

a three-dimensional image processing means for creating a three-dimensional image from the two-dimensional image data of a plurality of frames and the position information in the oscillation direction which

are sequentially outputted from the scanning conversion means.

Claim 6 (previously presented): The ultrasonographic equipment according to claim 2, wherein the three-dimensional image processing means forms a three-dimensional image based on angle information obtained by interpolating the oscillation angle information detected by the oscillation angle detection means.

Claim 7 (currently amended): The ultrasonographic equipment according to claim 5[[1]], wherein said data~~the oscillation angle information~~ is inserted between the image data arrays at blanking times ~~of~~located between the image data arrays~~streams~~.

Claim 8 (currently amended): The ultrasonographic equipment according to claim 2, wherein said data~~the oscillation angle information~~ is inserted at blanking times located between the image data arrays.